U. S. Extension Service.

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Extension Service
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Report of Conference of Extension Agronomists and Cotton Specialists
College Station, Texas, July 10-12, 1946

By
J. M. Saunders
Extension Cotton Agronomist

The purpose for which the conference of Agronomists, Cotton Specialists and Seed Improvement Association representatives was called was to discuss problems of mutual interest throughout the cotton belt with particular emphasis directed to seed multiplication, storage and distribution. Emphasis was directed on this particular phase of the cotton improvement program since it has become of utmost importance to utilize the available seed stocks to a better advantage in the future if they are to meet the needs of the cotton states. The inaguration of the 7-Step Cotton Improvement Program in the Southern Region has materially increased demands on foundation seed stocks.

J. M. Saunders, Cotton Agronomist of the U. S. D. A. Extension Service, called the meeting to order at 9 A.M. July 10, and introduced Director Ide P. Trotter of the Texas A. & M. Extension Service who delivered the address of welcome.

Director Trotter not only made the group in attendance feel welcome at A. & M. College, but as a member of the South Wide Cotton Committee was thoroughly conversent with some of the major problems and directed the thinking of the group in attendance toward constructive solutions.

H. H. Williamson, Assistant Director of Extension Work, U.S.D.A., discussed the Extension Educational Cotton Program. The following is quoted from a paper delivered by Director Williamson:

"Cotton continued to be a primary factor in our national economy. All unmistakable signs indicate that in the South a new pattern of agriculture is being forged. There is much evidence of rapid adjustment in farm management and farm practices. Cotton's search for a new and more secure anchorage in our economy is the motivating force.

"The problems in which cotton is involved are the number one challenge to the agricultural leadership of this generation. The multitude of problems surrounding cotton production, processing, and distribution beg for decisions. One major question is whether cotton shall continue as the basic crop in Southern farming, or whether it is to step aside in part and make way for other sources of farm income in this new farm pattern that is in the making.

If farmers, individually or as a group, are to give the answer, they need to have the facts. In addition to knowing how to produce good cotton, they will need a better general understanding of some of the complicated factors and technical situations that enter into the making of prices, markets, and income from cotton. They look to the extension services and research divisions of the land-grant colleges and the Department of Agriculture for leadership

and guidance in developing the needed information materials. This is a big educational challenge. It requires intelligent adherence to the principles of true cooperativeness and devotion to the cause of improving farm living through better farming.

"It is generally recognized that an approach to a solution of the cotton farmers' problems must be based on a consideration of several principal factors. One lies in the establishment of a national policy as regards the future of cotton in domestic and international trade. Leadership for this must naturally come from the responsible policy-making bodies, such as the Congress, farm organizations and other interested groups, and the executive leaders of government. Another factor is that of well-organized and coordinated programs of research in production, uses, marketing, and manufacturing.

"But another and equally important factor is one where we in the field of education have the greatest responsibility. It consists, first, in devising ways and means for carrying to the farm people in the South the basic economic facts that will stimulate clear thinking, frank discussions, and result in sound conclusions. Secondly, there are matters of immediate action to be taken, things that cotton farmers can do at once, whereby they can build constructively toward improving their own position with regard to future cotton farming.

"As a specific approach to the latter phase of the problem, Southern extension directors have been for some time working with the Federal Extension office and in consultation with keymen of the Department of Agriculture in developing an over-all type of educational program relating to cotton production and marketing. The chief objective was to develop a program that would be sound for producers and at the same time would serve as a guide for coordinating and focusing in county and community extension activities as they relate to cotton. These efforts were crystallized in what is termed a 7-step cotton production program. The steps are directed primarily to the things that can and should be done on the farm. However, the farmers' interests and Extension's responsibilities go beyond the reduction in the cost per pound and the improvement in the grade of cotton. The production of cotton on the farm is only a part of the cotton problems, only a part of a community or area farm program, and only a part of an extension program. Programs relating to cotton production, when projected in a given locality, must be balanced with the over-all plans and programs for the area.

"The 7-step program presents and gives emphasis to the "why" of each step. Each State land-grant college, through its extension service, has developed the "how" for each of the steps as it applies to conditions in the State. Time will not permit the reviewing of accomplishments being made as related to each of the steps. We are well aware that much progress is being made in each State.

"As is readily recognized, the program is simply a broadening and bringing together, and an intensification of the educational work that has been carried on by the extension divisions of the land-grant colleges and the U. S. Department of Agriculture.

"It is a two-pronged program. One big job is for county extension agents to carry to farmers through demonstrations and in every way possible the major steps in production -- steps they can take on their own farms and the things they can do cooperatively in their communities. Every farmer should have a chance to understand and appreciate the possibilities of those steps on his farm. They point the way to improved quality of cotton at a lower cost of production. It is a program for sound, balanced farming and efficient production of quality products. Inefficient production on the farm, as in the factory, will not aid in the solution of economic problems.

"Another big job, as has been previously suggested, is to carry to farm people and others interested, the economic facts about cotton and Southern agriculture in an understandable manner. We have passed the time when farmers can largely solve their problems alone in their own cotton fields, for, as we well know, production is only a part of the problem. They need facts about problems of price, total supply, competition, regional and national welfare.

"We consider one of Extension's responsibilities is to carry this type of information as it is developed by our economic research agencies to farm people in a single, straightforward, understandable way, so that they may discuss it and form their own conclusions, individually and as a group. The program is and must be a cooperative one.

"A few months ago Secretary Anderson commented to the effect that Extension's job was to hold the lantern of information as a guide for farm people. We extension people in the Southern States certainly need to hold the lantern high during the years just ahead while Southern agriculture is being remodeled.

"Agronomists and cotton specialists of the State extension services have a primary responsibility for the success of the 7-step cotton production program. This conference, in my opinion, will prove to be a distinct contribution to its further development."

Dr. H. W. Barre, Chief of the Division of Cotton and other Fiber Crops and Diseases of the Bureau of Plant Industry, Soils and Agricultural Engineering, gave a very constructive talk on Recent Developments in Research in Cotton Quality. Dr. Barre presented with the aid of lantern slides, background information on the growth and structure of cotton fiber and explained the difference in fiber properties and spinning value of different varieties and the effect of environmental factors and place effect on these properties and values.

He also gave a brief report on the present status of the one-variety program, emphasizing the need for solidifying and enlarging the one-variety areas and of developing an adequate seed program including plans for seed increase, storage and distribution to furnish a constant and adequate supply of seed for the larger areas. Following the talk by Dr. Barre, a film was shown and discussed by George W. Pfeiffenberger, Cotton Research Supervisor of the Chicopee Manufacturing Corporation Research Spinning Labratory located in Lubbock, Texas. The film was made for educational purposes and showed the spinning operations from the raw cotton to the finished products. The methods used in testing for

fineness of fiber and for tensile strength and the correlation of these factors in spinning operations proved of interest to the group and emphasized some of the statements made by Dr. Barre on recent developments in research in cotton quality.

Before the close of the morning session, Committees were appointed by the Chairman. A "Cotton Committee" composed of cotton specialists from each of the cotton states and others whose chief interest was directed to cotton; a committee on "Peanuts" composed principally of agronomists and a third committee on Seed Improvement Associations composed of representatives of Seed Improvement Associations from the Southern States. The committees were charged with the responsibility of noting throughout the conference, the common problems affecting each of the committee assignments, and at the close of the conference make recommendations for group discussion and approval, to serve as a guide throughout the Southern States where applicable.

The afternoon program of the first day was a field tour. The first stop was on the Texas Experiment Station Farm where T. R. Richmond, Agronomist, In Charge of Cotton Breeding work of the Texas Station, explained some of the breeding work that is now being carried on at the station and pointed out to the group a large number of strain and variety tests that are being conducted.

The second stop of the tour was on the George Chance Plantation where 2000 acres of cotton planting seed are being multiplied for distribution by the Texas Planting Seed Association.

The seed breeding and multiplication program is carried out through a joint agreement between the Texas Experiment Station, Bureau of Plant Industry, Soils and Agricultural Engineering and the Texas Planting Seed Association, for the purpose of supplementing the cotton planting seed supply for Texas of certain improved varieties where the supply is inadequate to meet requirements. The last stop on the tour was at the Texas Planting Seed Association, headquarters located at Bryan, Texas. The Texas Planting Seed Processing and Storage Plant is located on a 7-1/2 acre tract of land near Bryan, Texas and represents an investment of approximately $80,000. It is a cooperative with a membership of 180 community organizations representing some 12,000 farmers. It is equipped for delinting, treating, storing and conditioning 168,000 bushels of cotton planting seed. The financing, building and operation of the plant was discussed by Mr. R. A. Graham, President of the Association, and Mr. L. E. Ellwood, Manager. Following the inspection tour of the Plant, the association was host to the group and served a barbacue dinner.

The conference opened on the second day with a Discussion of the Problems of Seed Distribution and Seed Production by O. S. Fisher, Agronomist, Extension Service, U.S.D.A. Mr. Fisher explained that "The seed certification program was based on taking the foundation seed produced by the plant breeders of the various State and Federal experiment stations and by private plant breeders and multiplying it under very careful supervision and certifying the part that passed field and bin inspection, in order to increase the supply of good seed for planting purposes."

Just as soon as it is practicable for the State associations to assist, it is the plan of the International Crop Improvement Association to confine the certification work to new and improved strains and varieties approved by the various experiment stations.

This program covers all kinds of field crops, including cotton. In 1945 there were nine (9) States that certified 261,461 acres, producing 6,398,727 bushels of certified cotton seed. Practically all of this is first-generation seed from breeders' stock, and more than 66 percent (or 4,276,978 bushels) of this seed is of improved varieties that are desired in the cotton seed improvement program. Mr. Fisher stated that the main object in certifying cotton seed is to maintain its purity and to increase the supplies primarily for use in organized communities, although some of this seed, of course, goes to farmers in unorganized areas.

Mr. Fisher called on Mr. John W. Oakley, Secretary of the Mississippi Seed Improvement Association, to outline the way they handle their certification work in that State. Mr. Oakley stated that they were inspecting and certifying all first- and second- generation cotton seed produced from breeders' stock; that this included the seed produced by the large plant breeders as well as that produced by individual farmers over the State; that the large plant breeders had agreed to give first preference to the growers of cerfified seed in the State, in order to multiply their rather limited seed supplies. Mississippi certified in 1945, 789,262 bushels of seed of Delta Pine, Stoneville, Coker, Bobshaw, Delfos, and Wilds. The bulk of this seed (654,196 bushels) was of the two improved varieties of Delta Pine and Stoneville. He stated that all of this certified seed was put out for the 1946 crop. Mr. Oakley stated that the important breeders in Mississippi were strongly back of the certification program, as they felt that it was one of the ways to make possible better production of high-quality cotton for both one-variety communities and individual farmers.

Mr. A. D. Stuart, Seed Specialist for the North Carolina Crop Improvement Association, Raleigh, North Carolina explained that their method of carrying on their work was much like that described for Mississippi; that they were confining their work almost entirely to the Coker 100 wilt-resistant strain; that, although they certified a small amount of Wilds, Coker 100, and Coker 200 the larger part of their certification in 1945 was of the Coker wilt-resistant strain, amounting to 28,270 bushels. Mr. Stuart also stated that in 1946 they would inspect and certify only the Coker 100 wilt-resistant strain, in order to standardize their cotton with this one-variety. In this way they hope to have the entire State of North Carolina practically a one-variety community.

In certification work the States are confining their work to the strains approved by the State experiment stations for general distribution and for use in one-variety communities, and, although only a small percentage of the cotton seed crop is certified, if this is properly taken care of, especially in one-variety communities, it can be a big help in increasing the seed supplies of the adapted strains for better cotton production.

Reports were then given by State Extension Cotton Specialists on "Methods, Progress and Problems of Cotton Improvement Work" in their respective States. These reports were summarized by areas, with C. A. McLendon, Senior Agronomist of the Bureau of Plant Industry, Soils and Agricultural Engineering, Regional Director Southeastern States; Bode Hughes, Agronomist, Bureau of Plant Industry, Soils and Agricultural Engineering, Assistant Regional Director, Mississippi Valley States; and R. F. Saunders, Regional Director, Western States, giving the summaries for the three regions.

The report by States and summaries by regions indicated satisfactory progress toward one-variety production had been made during the past ten years, but that much remained to be done in the future. The elimination of a number of low producing varieties in all of the states reporting, indicate progress toward standardization. There are four varieties that are being planted across the cotton belt that accounts for a high percent of the cotton grown. This number is significant since there were 20 to 30 varieties planted in some of our large cotton producing states a few years ago.

There were two problems in common to all of the States represented; planting seed, and marketing. Most of the States are following a program of seed multiplication, but not sufficient to supply an ample and continuous supply of good planting seed.

Thursday afternoon of the second day Minimum Requirements for Adequate Ginning Service in One Variety Communities were discussed by J. C. Oglesbee, Jr., Extension Cotton Ginning Specialist of the U.S.D.A., and A. M. Pendleton, Extension Cotton Ginning Specialist of the U.S.D.A. In discussing the minimum requirements, Mr. Oglesbee stated it was his feeling that "We as leaders have not given adequate council to the one-variety group membership concerning ginning services." By this, he continued, "I mean that very little consideration has been given to the type of equipment and services available at gins selected to handle the cotton from organized groups." Mr. Oglesbee stated that the minimum machinery requirements for ginning hand picked cotton in the Southeast would be: (1) Seed cotton drier of approved type, preferably the government tower design, or its equivalent for air volume and exposure; (2) Modern extractor, cleaner feeders that are easily accessible for cleaning. Many of the present day machines rarely retain any locks of seed cotton; (3) High speed overhead mating gin stands with an easy dump for the seed roll; (4) All fans, piping, valves, separators, should be designed so that they will not retain collections of seed cotton; (5) A pure seed handling system is a must. In this system no seed augers, seed plugs, or bucket elevators can be used; (6) Proper lint handling systems, condensers and double box pressers to avoid mixture of the lint or bale planting. Mr. Oglesbee stated that in selecting a gin the one-variety group should avoid those that have: (1) No pure seed system; (2) Inaccessible or badly worn overhead apparatus such as separators, cleaners, etc.; (3) Inaccessible distributors and feeders, (belt distributors and pnaumatic elevating systems are in the group); (4) Faulty overhead piping, valves, telescopes, etc.; (5) A careless or inefficient staff. Following the paper delivered by Mr. Oglesbee, A. M. Pendleton serving the states west of the Mississippi River, led the discussion on the ginning phase of the program. He stated that he had known of many instances where ginners and farmers had been sold on the one-variety program rather than educated to its advantages, which resulted in a short lived program.

In discussing the Cotton Marketing Situation in the Southern States, Mr. L. R. Paramore, Senior Extension Economist, U.S.D.A. pointed out that "The cotton improvement programs of the Department of Agriculture, in cooperation with the State land grant colleges, cotton farmers, the trade and textile manufacturers during the past 10 years, have shown remarkable success. In the 1931-32 season only about 1 percent of the total U. S. cotton acreage was produced under the one-variety community cotton improvement program. By 1945-46 this program has grown to where 7,226,000 acres and 4,172,000 bales of cotton were produced under this program. These quantities represent 40 percent of the acreage and 45 percent of the production of the total U. S. crop. The Smith-Doxey classing service started in the 1938-39 marketing season has grown from 84,000 bales - 7 percent of the crop - to 4,037,000 bales in the 1944-45 season and 2,888,000 bales in the 1945-46 season, or 34.1 and 32.8 percent of the total crop.

The objectives, states Mr. Paramore, of these and other cotton programs are to improve efficiency in production and marketing and to raise the level of cotton quality in relation to its various uses by the textile industry. The need for establishing and attaining these objectives stems from the farmers' effort to increase net income from cotton production and the research showing the importance of variety and quality of cotton in turning out the textile requirements of the nation.

The research and testing work on cotton has shown that variety is the most important single factor in determining staple length and spinning value and that it should be used generally throughout the marketing channel as a supplement to grade and staple in determining quality. A study of mill requirements in relation to cotton quality improvement made by the USDA showed that in 1938-39 about 2 percent of the mills used variety as a supplementary basis for buying cotton of the characters desired. More recent observations indicate that this percentage has increased but the practice is by no means yet proportinate to the volume of one-variety cotton produced. Review of the data on staple length and variety shows a tremendous upward trend in the production of improved variety cotton of longer staple lengths. The marketing system, however, has not been adjusted to identify and handle this better cotton to assure producers and the users of cotton the full benefits from selling and buying cotton on a quality basis.

In conclusion Mr. Paramore stated that the cotton improvement program has now reached the point where it is dependent for maximum success on adjusting the system of ginning, marketing, and handling on the basis of quality as measured by grade, staple, variety and spinning value. To permit these adjustments, farmers will have to further expand and concentrate the production of superior varieties and qualities to facilitate the assembling and handling of cotton on such a basis. The trade will have to generally understand the need for these adjustments and the users of cotton will have to demand the superior varieties and qualities before the improvement program can become universal. The agencies working with farmers, the cotton trade and the manufacturers need to make a coordinated effort to deal with the marketing of improved cotton just as effectively as has been done with production. Unless the value of improved cotton is recognized in the marketing system and by the manufacturers of cotton products, the production program cannot achieve its objective.

The evening session of the second day closed with a discussion of the Peanut Situation in the Southern States led by J. H. Beattie, Senior Horticulturist, Bureau of Plant Industry, Soils and Agricultural Engineering. In discussing this important crop, Mr. Beattie said in part, "The peanut is a part and parcel of a rational farming system, not a single crop specialty. In the Southern States it has a wide, nevertheless restricted adaptation. It is sensitive to the soil, moisture, and other conditions under which is is grown, yet it now occupies third place among the cash crops produced in the South, being exceeded in farm value only by cotton and tobacco."

It seemed, therefore, the part of wisdom to include peanuts in the agenda of the conference of Extension Agronomists and Cotton Specialists of the Southern States. Peanut research and extension has not progressed to the point where, like cotton, we can set up a well rounded seven point program, -- indeed the crop is a half century behind in progress, yet the needs of the crop are so well appreciated that the Conference was able to adopt specific recommendations covering phases of the problems which demand painstaking attention. If the peanut is to maintain its relative importance in post war Southern agriculture problems of crop rotation, seed stocks, plant nutrition, disease and insect control, mechanization to reduce labor and decrease production costs are of pressing importance and must receive immediate and painstaking care. State and Federal research and extension agencies and all organizations of the industry have a definite part to play. It is not a question of the peanut crop alone, it is a problem of one of the necessary members of the Southern Agricultural cropping system.

The third day of the conference was devoted to committee reports, discussions and conclusions.

Each committee chairman read the report and recommendations made by his committee. These reports and recommendations were discussed and revised in accordance to the thinking of the group, adopted and requested that they be made a part of the report on the conference. The following resolution was made and unanimously adopted:

1. To the Directors of Extension Cotton Belt States:

Whereas, the Extension Agronomists and Cotton Specialists of the Southern States have derived much benefit from the conference held at College Station, Texas, July 10-12, 1946, and

Whereas, it is felt that there are many problems which should be considered by these groups in developing a balanced agricultural program for the South

Therefore, be it resolved that the Extension Directors are requested to provide for a similar conference in 1947, the time and place and program to be arranged by the Southern Directors and that a copy be mailed to each director in the Cotton Belt and to Mr. R. A. Graham and L. E. Ellwood.

Expression of Appreciation

Mr. Chairman -

I move that you express to Dr. Trotter and his associates our sincere appreciation of their hospitality during the Cotton Conference and to Mr. Graham and Mr. Ellwood for the program and entertainment they provided us. Moved by A. D. Stuart.

Passed Unanimously

COMMITTEE REPORTS
AT CONFERENCE OF EXTENSION AGRONOMISTS
AND COTTON SPECIALISTS OF THE SOUTHERN STATES
COLLEGE STATION, TEXAS
July 10-11-12, 1946

I. Cotton - General Chairman - Bode Hughes

Subcommittees

1. Seed Program - Chairman - Fred Elliott
C. A. McLendon
J. T. Belue
J. A. Shanklin

2. Expanded Research Program - Chairman - Dr. G. N. Stroman
Dr. H. W. Barre
Roy W. Ellithorpe
C. L. Welch

3. Standardization of Reports - Chairman - Roy F. Saunders
I. W. Carson
J. W. Willis
H. B. Jones

4. Marketing - Chairman - Dale McGregor
L. R. Paramore
H. S. Boyleston
J. T. Stovall

II. Peanuts Committee - J. T. Belue, Alabama
E. A. Miller, Texas
H. A. Boyleston, S. Carolina
J. M. Weeks, Miss.
A. D. Stuart, N. Carolina

III. Seed Improvement Committee - J. M. Weeks
A. D. Stuart
A. G. Kilgore
J. T. Stovall
H. A. Woodle
John W. Oakley
O. S. Fisher
Clayborn P. Wayne
Wesley Chaffin

EXPANDED RESEARCH PROGRAM

Since there is an anticipation of an increase of funds for additional Research in Agriculture, the Southern Agronomists and Cotton Specialists representing Cotton States in a meeting at College Station, Texas, July 13, 1946, wish to call attention to the Directors of the State Experiment Stations and Leaders of Agricultural Research of the U.S.D.A. to the specific need of additional Cotton Research on (1) Genetics, (2) Practical breeding, (3) Increase, multiplication and storage of seed, (4) Insects and Disease control, (5) Fiber and Spinning Research, (6) Mechanization, cultural management practices, (7) Soil Management and Soil Fertility and (8) other researches which improve the quality and increase efficiency of production.

Also, we recommend that the Conference of Extension Agronomists and Cotton Specialists go on record requesting a digest of all cotton research work that has been done to date be compiled and published. This recommendation is directed to the Office of Information and Office of Experiment Stations of the U. S. D. A.

The Committee:

Dr. G. N. Stroman, Chairman
Dr. H. W. Barre
Roy W. Ellithorpe
C. L. Welch

STANDARDIZATION OF REPORTS

There is need for clarification of the different interpretations which are being placed on cotton improvement communities by the Extension Service, Bureau of Plant Industry and the Production and Marketing Administration.

We recommend that our representation in Washington take this matter up with the officials of these three organizations with the idea of either having free classification confined to communities where growers are organized in an effort to improve cotton by the generally accepted method of one-variety production or by designating communities set up solely for classing service in a way that they will not be confused with one-variety communities. The benefits of cotton classification by the Production and Marketing Administration are recognized and it is not the desire of this committee to restrict this service in any way.

Marketing Recommendations

Leading cotton mills and buyers are showing increasing interest in purchasing cotton on the basis of variety. In considering the problems in adjusting marketing methods and practices to permit variety to be used in addition to grade and staple in the purchase and sale of cotton throughout the marketing channel, recognition must be given to the lack of interest and knowledge of the trade and cotton mills as to the value of variety as a measure of quality and the fact that mills prefer to purchase their requirements through established trade channels.

In connection with the development of adjustments in marketing methods that will take variety into account in measuring quality, the committee makes the following recommendations:

1. Development of area marketing programs for selling one-variety cotton. A minimum of 5,000 bales should be required before undertaking an area marketing program.

2. Permanent identification of each bale of cotton at the gin showing gin number and season produced. In order for identification to be effective, there must be federal legislation requiring its universal use. Code numbers would have to be assigned to each gin to avoid duplication and confusion.

3. A concentrated educational program should be carried out with the mills and the cotton trade on the value of variety in the determination of quality and the use value of cotton.

4. Development of standard terms and descriptions of variety pure cotton on a belt-wide basis.

5. Determination of minimum requirements for designating one-variety cotton.

6. The appropriate agencies during the next year should give thorough study and consideration to the problems of selling cotton in the seed. The recommendations and findings should be presented to the next conference of extension cotton specialists for further consideration.

SEED PROGRAM

Subcommittee -

Fred Elliott - Chairman
C. A. McLendon
J. T. Belue
J. A. Shanklin

1. Breeders and Seed Distribution:

Continue to encourage breeders to distribute their seed as far as possible in line with varieties adopted in organized one-variety communities, counties or larger areas.

Breeders are to be complimented for their efforts in limiting their varieties to those which are acceptable to the cotton improvement program. Much progress has been made by most breeders in this direction and it is hoped that others will cooperate similarly.

2. Seed Multiplication, Processing, Storage and Distribution:

In order to provide and make available pure seed for planting purposes in sufficient quantity to take care of the expanding improvement program, it is imperative that in suitable areas, centers be developed for seed multiplication, processing, storing and distribution, the seed be distributed from these centers not to be more than first year from the breeder. In no case should it be more than two years from the breeder. Also it is recommended that seed be distributdd and made available at a minimum price.

REPORT OF SEED IMPROVEMENT COMMITTEE

The development of a balanced system of farming in the South will require adequate supplies of seed of high quality. To achieve this objective close cooperation between the Experiment Stations, the State Crop Improvement Associations, the Extension Service, recognized plant breeders and those charged with the development of the one-variety cotton improvement program, is essential.

The committee recommends that definite responsibilities be assumed by the different groups as follows:

A. Experiment Stations

It shall be the functions of the Experiment Stations to:

1. Develop new and improved varieties and strains.

2. Test varieties and strains which have been developed by Experiment Stations and recognized private plant breeders.

3. Develop limited supplies of foundation seed for increase purposes.

B. The Crop Improvement Association or State Seed Certifying Agency

1. Foundation seed supplies shall be increased by members of the association for certification purposes.

2. The supplies of certified seed shall be made available for planting, giving preference to organized groups.

C. The Extension Service

The Extension Service shall be responsible for the educational phases of the seed improvement program.

D. One-Variety Cotton Improvement Associations

It is recommended that one-variety cotton improvement associations avail themselves of the opportunity of using registered or certified seed in promoting their cotton improvement program.

Respectfully submitted:

J. M. Weeks, Extension Agronomist, State College, Mississippi
A. D. Stuart, Extension Seed Specialist, State College, Raleigh, N. C.
A. G. Killgore, Assistant Extension Agronomist, L.S.U., Baton Rouge, La.
J. T. Stovall, Administrative Officer, New Mexico Crop Improvement Ass'n., State College, New Mexico
H. A. Woodle, Extension Agronomist, Clemson, South Carolina
John W. Oakley, Executive Secretary, Mississippi Seed Improvement Ass'n., State College, Mississippi
O. S. Fisher, Extension Agronomist, U.S.D.A.
Clayborn P. Wayne, Extension Agronomist, State College, New Mexico
Wesley Chaffin, Extension Agronomist, Stillwater, Oklahoma - Chairman

PEANUT REPORT

The Conference of Southern Agronomists and Seed Certification officials recommend that;

1. Peanuts be made a definite part of the balanced farming system of the Southern States.
2. Good seed, treated, be used for planting the crop and that certification of seed stocks be taken up as soon as possible.
3. Close spacing for full stands be urged.
4. Crop dusting for control of leaf spot disease be followed.
5. Adequate fertilization and rotation practice be followed with basic studies of plant nutrition continued and enlarged.
6. Use of modern machinery be encouraged in handling the crop.
7. A strong research program be encouraged for developing all phases of the peanut crop.

MARKETING RECOMMENDATIONS

1. Statement of problem.

2. Questions for consideration.

   a. Lack of interest on the part of mills.

   b. Lack of knowledge on part of mills.

   c. Mills prefer to purchase through regular trade channels.

Leading mills and leading buyers are beginning to show interest in buying one-variety.

1. Develop assembly program for selling one-variety cotton with a minimum of 5,000 bales.

2. Gin numbers should be used instead of compress numbers. This would call for a gin code.

3. We recommend permanent identification originating at the gin backed up by legislation requiring its universal use, a federal law. Identification should show season produced.

4. Need some one to work with mills.

5. Standardization of terms and descriptions of variety-pure cotton on a belt wide basis.

6. Minimum requirements for designating cotton as variety-pure.

7. It is recommended that the appropriate agencies during the coming year give thorough study and consideration to the problems of selling cotton in the seed and that the findings and recommendations be presented back for further consideration at the next meeting of this group.

Attendance at
CONFERENCE OF EXTENSION AGRONOMISTS AND COTTON
SPECIALISTS OF THE SOUTHERN STATES
College Station, Texas
July 10-11-12, 1946

Carl A. Mooseberg, Agronomist, U.S.D.A., Greenville, Texas
Dow D. Porter, Agronomist, U. S. Cotton Field Station, Greenville, Texas
Henry Dunlavy, Agronomist, Oklahoma Agri. Exp. Station, Stillwater, Oklahoma
L. E. Ellwood, Manager, Texas Planting Seed Association, Bryan, Texas
Clayborn P. Wayne, Extension Agronomist, State College, New Mexico
R. A. Graham, Texas Planting Seed Association, Greenville, Texas
Bill Tipton, Editor, Acco Press, Houston, Texas
Webster Pendergrass, Agronomist, University of Tennessee, Knoxville, Tennessee
Allen G. Killgore, Assistant Agronomist, L.S.U., Baton Rouge, Louisiana
Wesley Chaffin, Extension Agronomist, Extension Service, Stillwater, Oklahoma
H. A. Woodle, Extension Agronomist, Extension Service, Clemson, South Carolina
H. H. Williamson, Assistant Director, Extension Service, Washington, D. C.
Ide P. Trotter, Director, Extension Service, College Station, Texas
C. A. Sheffield, Field Agent, Extension Service, Washington, D. C.
J. D. Prewit, Vice Director, Extension Service, College Station, Texas
A. D. Stuart, Seed Specialist, Extension Service, Raleigh, North Carolina
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